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10/604,048	06/24/2003	John Gibeau	202-0036	1047
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BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER HUANG, SIHONG	
			ART UNIT 2632	PAPER NUMBER

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/604,048

Applicant(s)

GIBEAU, JOHN

Examiner

Sihong Huang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/24/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. ***The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.*** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the term "means" in line 3 should be avoided. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 2, 10, 12 and 20, the use of the term "a module" is confusing. As illustrated in figure 1, almost each element is labeled or described as "a module". As disclosed through out the specification, many functions recited in the claims are carried out by the cooperation of many modules, not by a single module ("a module" as claimed). Accordingly, "a module" is confusing

and inconsistent with the specification. Clarification without introduction of new matter is required.

In claim 6, "the wireless module" lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 7, 9-12, 17 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Minagawa et al. (US 6,600,430 B2).

**Regarding claims 1, 10 and 11**, Minagawa et al disclosed a system (Figs. 1, 2 and 4) for use in a vehicle for connecting a wireless device (portable device, such as telephone set (col. 1, line 19), personal information assist device PDA, electronic note book or the like, col. 2, lines 48-52) carried by an individual to a vehicle network (col. 1, lines 6 and 13, etc.), the system (Figs. 1, 2 and 4) comprising:

a hands-free sensor (the getting-on sensors, sensors such as a seat weight sensor (col. 3, line 14), an infrared ray sensor (col. 3, line 14), vehicle door opening/closing sensor or detector (col. 3, lines 12-13 and col. 7, lines 15-16), pressure sensor (col. 7, lines 17-18), etc.) for generating a sensor signal (any one of the output signals of the getting-on sensors indicating the individual is positioned within a predefined distance relative to the vehicle (col. 1, lines 8-11 and col. 2, lines 20-27, etc.); and

a module ((as best understood by this examiner in view of the 112, 2<sup>nd</sup> rejection as addressed above), see Figs. 2 and 4) enabled based on the sensor signal for determining whether the individual is carrying the wireless device (that is, based on the output signal of the getting-on sensor, an inquiry signal is sent intermittently to start the automatic set up of the wireless link between the portable unit (Fig. 1) and the vehicle network (Fig. 2, col. 6, line 52 to col. 7, line 20)) and for connecting the wireless device (telephone set or PDA, etc.) carried by the individual to the vehicle network (that is, if the wireless device is within range, the wireless device will respond to the communication from the vehicle network and start comparing setting-up code, when the setting-up codes are coincident with each other, a wireless link is established, col. 3, lines 23-30).

**Regarding claims 2 and 12**, the module (see Figs. 2 and 4) being configured to interpret the sensor signal (the output signals from the getting-on sensors) to determine whether the individual desires to sit in the vehicle (for example, by the output signal of the seat weight sensor and/or infrared sensor, etc., that is, when a user sits into the seat of the vehicle, the seat weight sensor/getting-on sensor will generate a sensor signal indicating that the user desires to sit in the car) and whether the individual desires to exit the vehicle (for example, by the seat weight sensor or door opening/closing sensor or infrared sensor, etc., that is, when the sensor senses no weight on seat, and/or vehicle door opened and then closed, and/or no human body is detected).

**Regarding claims 7 and 17**, the hands-free sensor of Minagawa et al is a door switch (col. 7, line 16 and col. 3, line 13).

**Regarding claims 9 and 19**, the hands-free sensor of Minagawa et al is a seat weight sensor (col.3, line 14).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, 5, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minagawa et al. (US 6,600,430 B2).

**Regarding claims 3, 5, 13 and 15,** Minawawa et al differ from claims 3-5, 13-16 and 20 in that the wireless communication disclosed in the preferred embodiment illustrated in Figs. 1, 2 and 4 is not carried out by Bluetooth technology or protocol. However, at the end of the disclosure (col. 10, lines 2-4), Minawawa et al suggested that Bluetooth protocol or technology can be employed for the wireless communication in order to reduce cost. Based on this teaching, it would have been extremely obvious to a person having ordinary skill in the art at the time of the invention to employ the Bluetooth technology as suggested by Minawaw et al to carry out the wireless communication of the preferred embodiment or system shown in Figs. 1, 2 and 4 in order to reduce cost.

**Regarding claims 3 and 13,** the modified system (that is by replacing the wireless communication of Figs. 1 and 2 with Bluetooth technology or protocol) of Minawaw et al will have a Bluetooth enabled module and the Bluetooth module is configured to create the wireless link or communication. As described above, when the getting-on sensor (such as seat weight sensor, infrared sensor, etc.) generates an output (such as when the seat weight sensor detects weigh or the infrared sensor detects a human body, etc.), an inquiry signal is sent intermittently

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to start the automatic set up of the wireless link between the portable unit (Fig. 1) and the vehicle network (Fig. 2, col. 6, line 52 to col. 7, line 20) and for connecting the wireless device (telephone set or PDA, etc.) carried by the individual to the vehicle network (that is, if the wireless device is within range, the wireless device will respond to the communication from the vehicle network and start comparing setting-up codes, when the setting-up codes are coincident with each other, a wireless link is established, col. 3, lines 23-30).

**Regarding claims 5 and 15**, as explained above, the modified system will have the Bluetooth enabled module for creating wireless communication link for connecting the wireless device (such as PDA, telephone set, electronic note, etc.) to the vehicle network (see Fig. 2) when the individual desires to sit in the vehicle (sensed by the getting-on sensors such as the seat weight sensor, door opening/closing sensor, and/or infrared sensor, etc.) and for disconnecting an established wireless link (col. 4, lines 3-6, 9-12, 16-18 and 22-26, etc.) when the individual desires to exit the vehicle (for example, by the seat weight sensor, door opening/closing sensor or infrared sensor, etc., that is, when the sensor senses no weight on seat and/or vehicle door opened and then closed, and/or no human body).

9. Claims 4, 6, 14, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minagawa et al. (US 6,600,430 B2) in view of Frank et al. (US 2003/0224840 A1).

Minawawa et al disclosed the system as discussed above and further included a speaker module 35 and microphone module (col. 8, lines 35-37) connected to the vehicle network for carrying hands free mode phone conversation, and a wireless device having telephone functions for carrying phone conversation (col. 2, lines 35-37). The modified system of Minawaw et al further differs from **claims 4 and 14** in that it does not disclose transferring the phone

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conversation (or call) from the wireless device (portable wireless telephone, mobile phone, or cellular) to the vehicle network for continuing the phone conversation using the speakers and microphone modules in hands free mode. However, Frank et al, from the same field of endeavor, similarly teach a communication system in which Bluetooth technology or protocol (pp 0016, line 10 and pp0036, line 4) is used for carrying out communication between a mobile phone (pp 41) and speakers module (105, 106) and microphone module (107) of a vehicle network 101 (pp 0035, lines 2-4 and pp 0043). Frank et al, in Fig. 3 and in pp 0050 further teach that a phone call on the mobile phone can be transferred to the telematics device or vehicle network (101, pp 0043) for continuing the phone call or conversation in the vehicle using the speakers module and a microphone module in the hands free mode. Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the transfer call method or means as taught by Frank et al I to the system of Minawawa et al. One of ordinary skill in the art would have been motivated to do this because it allows continuing a phone conversation without disconnection or dropping of the call and at the same time allows a user or operator to carry on phone conversation in the hands-free mode and operate the vehicle.

**As to claims 6 and 16**, the modified system of Minagawa et al also does not teach transferring the call from the vehicle network (101, pp0043) to the wireless device (or mobile phone). However, as disclosed above, Frank et al teach a similar system. Frank et al in Fig. 3 and pp 0050 not only teach transferring a call from the mobile phone to vehicle network for hands-free mode phone conversation but also a call from vehicle network can be transferred to the mobile phone (pp 0050). Since it is well recognized that Bluetooth technology or protocol is



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practical for only short distance or range, it would have been obvious to a person having ordinary skill in the art at the time of the invention to transfer a call or phone conversation from the vehicle network to the mobile phone for continuing the phone conversation or call when the wireless communication link between the vehicle network and mobile phone is out of range (i.e., disconnected) in order to maintain voice communication on the mobile phone in a conventional way.

**Regarding claim 20**, Minagawa et al disclosed the system as discussed above and further included a door opening/closing sensor (col. 3, lines 10-13 and col. 7, lines 15-16), a module (Figs. 2 and 4), a speaker module 35 and microphone module (col. 8, lines 35-37) connected to the vehicle network for carrying hands free mode phone conversation, and a wireless device having telephone functions for carrying phone conversation (col. 2, lines 35-37). The system of Minagawa et al differs from claim 20 in that the preferred embodiment does not employ Bluetooth technology or protocol and does not disclose transferring the phone conversation (or call) from the wireless device (portable wireless telephone, mobile phone, or cellular) to the vehicle network for continuing the phone conversation through the speakers and microphone modules in hands free mode. However, as disclosed above, at the end of the disclosure (col. 10, lines 2-4 of Minagawa et al), Minagawa et al clearly suggest that Bluetooth protocol or technology can be employed for the wireless communication in order to reduce cost.

Furthermore, Frank et al, from the same field of endeavor, similarly teach a communication system in which Bluetooth technology or protocol (pp 0016, line 10 and pp0036, line 4) is used for carrying out communication between a mobile phone (pp 41) and speakers module (105, 106) and microphone module (107) of a vehicle network 101 (pp 0035, lines 2-4 and pp 0043). Frank

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et al, in Fig. 3 and pp 0050, further teach that a phone call on the mobile phone can be transferred to the telematics device or vehicle network (101, pp 0043) for continuing the phone call or conversation in the vehicle through the speakers module and a microphone module in the hands free mode. Fig. 3 of Frank et al shows the determination of whether the operator or individual is conducting a phone conversation (note, in order to transfer call carried by the mobile phone to the speaker module and microphone module in the vehicle network in hands free mode, it must determine the individual or user is conducting a call or phone conversation, otherwise there is no need to transfer the call to the hands free mode). Based on the teaching of Frank et al, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the call transfer method or means and Bluetooth communications as taught by Frank et al to the system of Minagawa et al. One of ordinary skill in the art would have been motivated to do this because it allows continuing phone conversation without disconnection or dropping of the call and at the same time allows a user or operator to carry on phone conversation in the hands-free mode while operating the vehicle as well as to reduce cost.

10. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minagawa et al. (US 6,600,430 B2) in view of Van Bosch et al. (US 2003/0098784 A1).

Minagawa et al differ from **claims 8 and 18** of the present invention in that Minagawa et al do not disclose that the hands-free sensor includes a motion sensor. However, Van Bosch et al disclose a similar system in which a portable wireless device or cellular phone 112 (pp 0015, lines 10-11) communicates with a vehicle network (Fig.3). Van Bosch et al further teach that a motion sensor 206 is employed to detect the occupancy of the vehicle (pp 0020). As Minagawa et al suggest other type of sensors can be used (col. 7, lines 13-20), it would have been obvious

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to a person having ordinary skill in the art at the time of the invention to employ any type of conventional sensors such as motion sensor taught by Van Bosch et al for the system of Minagawa et al for the purpose of monitoring occupancy of the vehicle. This supporting rationale is based on the fact that this is not the result of an attempt by the applicant to solve an unknown problem but merely amount the expenditure of selection of sensors known to a skilled artisan as design choice.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art reference Yamamoto (JP 2001-244877A) is cited to show another similar invention as to applicant's present invention.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sihong Huang whose telephone number is 571-272-2958. The examiner can normally be reached on Mon, Thu & Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sihong Huang

December 10, 2004

A handwritten signature in black ink, appearing to be 'Sihong Huang', written over a horizontal line.